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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/728,477	CROCE, SCOTT M.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sharidan Carrillo	1746	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/03/2003.
2. ☒ The allowed claim(s) is/are 15-19.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>12/03/2003</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

  
**SHARIDAN CARRILLO**  
**PRIMARY EXAMINER**

Sharidan Carrillo  
Primary Examiner  
Art Unit: 1746

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-14 and 20-27, drawn to a composition, classified in class 510, subclass 201.

II. Claims 15-19, drawn to a method, classified in class 134, subclass 3.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the composition can be used for descaling ferrous metal or polishing of a semiconductor wafer.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. DiPietro on 01/13/05 a provisional election was made without traverse to prosecute the invention of Group II, claim 15-19.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 1-14 and 20-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

6. Authorization for this examiner's amendment was given in a telephone interview with Mr. Mark DiPietro on 12/14/05.

The application has been amended as follows:

**Specification:**

Page 3, line 21, after "acids" insert --(10-40 weight %)

Page 3, line 21, after "thiourea", insert --(10-25 weight%)—

Page 7, line 8, after "others." Insert --The acid composition comprises a blend of nitric acid and hydrochloric acid, wherein the weight ratio of nitric acid to hydrochloric acid is about 0.01 to 1:1.--

**Claims:**

a) Cancel nonelected claims 1-14 and 20-27.

b) Claim 15:

line 4, delete "a major proportion of"

line 5, delete "-."

line 7, delete "cobalt and a chromium transition metal salt" and insert --mixture comprising a cobalt transition metal salt and a chromium transition metal salt—

c) Claim 16:

line 1, delete "composition" and insert --acid—

line 2, after "blend" insert —of—

d) Claim 17:

line 1, delete "16" and insert —15—

line 1, delete "composition comprises a mixture of a transition metal nitrate and a transition metal chloride" and insert —mixture comprises cobalt and chromium transition metal salts selected from the group consisting of nitrates, chlorides, and combinations thereof.—

e) Claim 18: line 1, delete "15" and insert —16—

7. The following is an examiner's statement of reasons for allowance: The prior art fails to teach or suggest a method of cleaning a metal surface using the claimed composition. Specifically, the prior art fails to teach a mixture of a cobalt and a chromium metal salt in combination with thiourea and the acid. Additionally, the prior art fails to teach the recited concentration ranges. The closest prior art is Bishop et al. which teaches copper sulfate, acid, and thiourea. Robinson teaches chromium salt, thiourea, HCl. Shimazu et al. teach thiourea, acid, and transition metal salts. However, none of the prior art references teach a mixture of the chromium and cobalt metal salt in combination with thiourea and acid.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on Monday-Friday, 6:00a.m-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo  
Primary Examiner  
Art Unit 1746

bsc

A handwritten signature in black ink, appearing to read 'S. Carrillo', with a stylized, cursive script.

SHARIDAN CARRILLO  
PRIMARY EXAMINER